



IMPERIAL IRRIGATION DISTRICT

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RPM

December 6, 2001

Mr. Larry A. Gilbert
945 East Worthington Road
Imperial, CA 92251-9764

Dear Larry:

I wish to thank you for your letter dated November 25, 2001 and the list of questions contained therein. The Imperial Irrigation District (IID) appreciates the interest and time of the Imperial County Farm Bureau Water Committee (FBWC).

I will do my best to provide answers to the Committee's questions. However, I do wish to remind the Committee that, other than establishing a baseline from which on-farm conservation will be measured, the IID Board has taken no action to finalize any other elements of an on-farm conservation plan. The answers that I will provide to your questions are reflective of current Board discussions. The answers provided in response to your questions are subject to change as the Board continues discussions and as groups such as the Farm Bureau Water Committee offer their input.

Your input to the process is important. Both the questions you ask, the discussions they trigger, and your suggestions as to how the questions you raise should be answered. I was hoping that your letter would offer suggestions on how an on-farm plan should be constructed and managed. I trust that, following your discussions on the November 19th presentation and my response to your questions, the Committee will step forward with some concrete suggestions on what they would like to see in an on-farm conservation program.

1. What are the quantities of conserved water that are planned to be transferred during each of the ramp-up years?

Response: The IID water Conservation Quantification Settlement Agreement (QSA) ramp-up schedule is attached.

2. What is the estimated price for each of those years?

Response: The estimated prices in 2001 dollars are shown in the attached spreadsheet entitled "Financial Projections". The values shown are in 2001

dollars, are reflective of the terms of the IID/SDCWA agreement and the QSA, and are not adjusted for future inflation.

3. Please describe the system improvements that are planned.

Response: Potential system improvements include expanded system automation, lateral interceptors, additional regulatory reservoir capacity, both main canal (East Mesa and WSM Reservoirs) and mid-lateral reservoirs, and additional East Highline seepage recovery systems.

4. Will they (system improvements) be able to capture significant amounts of "reject" water?

Response: If by use of the term "reject water" you are referring to canal operational spill, we estimate that system improvements can capture in the range of 85,000 acre-feet per year of canal operational spill.

If by use of the term "reject water" you are referring to water returned to the system due to increased flexibility in turn-off times and order adjustments, the answer is yes. The purpose of system automation, lateral interceptors, and additional reservoirs is to provide additional flexibility to water users so that they may effectively implement on-farm conservation projects and to insure water conserved on-farm is captured rather than spilled.

5. Will they be able to effectively increase usable canal capacity (as mid-lateral reservoirs would)?

Response: I am not sure that I understand the question. No physical enlargement of main canals for the purpose of increased capacity is being considered at this time. However, some lateral canals may require capacity improvements to provide interceptor inlet capacity, as was the case with the Plum-Oasis Lateral Interceptor.

If the question is intended to address the carryover issue, I am unable to provide an answer at this time.

6. During which years are system improvements planned to be installed?

Response: The current proposal is to install system improvements in 2002 through 2009. Please see the attached slides from the November 19th workshop.

7. What is the total estimate amount of system water to be conserved?

Response: We estimate 85,000 acre-feet per year of canal operational spill and an additional 15,000 acre-feet per year of main canal seepage can be conserved.

8. What is the estimated cost of the system improvements: capital costs, O&M costs, and annualized costs?

Response: The estimated range of annualized of system conservation cost, including capital and O&M, is \$45/AF (seepage recovery) to \$160/AF (upper range of lateral interceptors). These costs do not include environmental mitigation or site specific construction permitting costs. Additional system automation (beyond that provided in the design of lateral interceptors and reservoirs) may be required. Currently, these plans are not well enough defined to provide cost estimates.

9. How will it be determined that a landowner has engaged in fallowing?

Response: One purpose expressed by both the Board and by participants in past on-farm plan discussions (the Cox-Menvielle Committee) for placing a limit on the amount of per acre conservation is to remove any fallowing incentive. A second concept is what has been termed the "ASCS" approach were by each participating field would receive a base acreage calculated in the same manner that the Farm Services Agency (the old ASCS) calculates base acreage for USDA program payments. That base acreage would have to be "actively farmed" to receive conservation program payments.

Question for the FBWC: Remembering the fundamental principals for the on-farm program (simple and flexible), how does the FBWC suggest it be determined that a landowner has engaged in fallowing?

10. What will be the consequences of fallowing part of a parcel, an entire parcel, or a farm unit?

Response: Under the concept currently being discussed, in order to receive conservation payments, water must be conserved while the land is being "actively farmed".

Question for the FBWC: How would the committee define "actively farmed"?

11. Is there any fallowing prohibition for non-participating parcels, or just for participating parcels?

Response: For non-participating parcels belonging to landowners that chose not to be in the on-farm program, there would not be any fallowing prohibition.

12. How will conservation obligations be divided among those parcels offered for contracts?

Response: The only concept discussed to date is that of a lottery. For example, assume the on-farm program is for 200,000 acre-feet of water. All interested

landowners would sign a statement of interest, and participants would be selected by lottery until 200,000 acre-feet of conservation obligations had been awarded. Those selected first in the lottery would participate first. Another option is to hold a separate lottery each year of the ramp up period.

13. Will conservation obligations be awarded at the beginning with each being designated as to which year their contract would begin?

Response: See the response to question Number 12.

Question to the FBWC: How would you suggest questions 12 and 13 be answered?

14. Regarding pay-back obligations of non-participants:

Response: I am not sure I understand this series of questions. I certainly do not see the relevance of the stated examples. Under the current versions of the QSA and the Secretarial Implementation Agreement, IID would be limited to annual diversions from the Colorado River of 3.1 million acre-feet inclusive of all transfer amounts. If IID inadvertently diverts more than 3.1 MAF minus transfer obligations for that year, a payback obligation will be incurred. If IID diverts less than 3.1 MAF minus transfer obligations for that year, no payback obligation will be incurred.

The question becomes, if IID inadvertently incurs a payback obligation, how and who is responsible for repayment? Assuming that out of the 5,700 fields and 535 active water users within IID, some will be participants and some will not be participants, the concept presented on November 19 assumes that an overrun would be due to the use of non-participants and participants who are in default of their conservation obligations. Therefore, they would be the ones responsible for repayment. Between non-participants, the Water Code allows IID to select how shortages are allocated. The Board is considering requiring payback in accordance with actual deliveries compared to a baseline estimated for non-participants similar to that of participants.

As to the question of some potential IID water banking or storage program triggering an overrun, I would assume that IID would have the responsibility to use that stored water for payback when the payback came due. I would think that would be the reason for any such program; for IID to bank one year's "under-use" against potential future overruns.

15. Are non-participants as a group allowed to use without payback, the combined amount of all participant's under-use?

Response: I do not believe the Board or staff has specifically addressed this question. However, absent some type of intra-district water market (which would

probably require a baseline to be set for all parcels, participating or not) to the extent that participants use less than their baseline minus their conservation obligation, and IID's use is less than 3.1 MAF minus that year's transfer obligations, then yes, any under-use by participants would be available for use by non-participants. Assuming IID is within its diversion limit, and no participants are in default, why would non-participants incur any payback obligation?

16. Is there a situation where participants can be in an overuse situation and not incur any payback obligation?

Response: A participant in an overuse situation would be considered in default. Under the concepts presented on November 19th, the participant would have to repay the overuse in following year(s). IID may have its payback obligation forgiven in the case of flood control releases from Lake Mead. Under such conditions, IID may also forgive individual payback obligations.

17. What is the maximum amount of conservation obligation a landowner can acquire for land having an allocation baseline of 1 acre-foot or less?

Response: According to the concept discussed on November 19th, all lands with a history of water use during 1987-1995 are eligible to participate. Although the Board has not specifically addressed this question, I note that according to the water use records available to me, I cannot identify a single parcel that would have a baseline of less than one acre-foot.

Question for the FBWC: Are you aware of any specific parcel that would have a baseline of less than 1 acre-foot? If so, let me know so I can correct our records.

Question for the FBWC: What do you suggest as the maximum amount of conservation obligation a landowner can acquire for land having an allocation baseline of 1 acre-foot or less?

18. For Land having an allocation baseline of more than 1 acre-foot per acre?

Response: The Board has considered various maximum conservation obligation and payment limitations, 0.5 AF/ac, 0.67 AF/ac, 0.8 AF/ac, 1.0 AF/ac and no limit. However, there is recognition that a landowner should not be allowed to sign up for more than he can reasonably be expected to conserve. The question is how to make that determination. This is definitely a point where the Board and staff would appreciate suggestions from the FBWC.

Question for the FBWC: How should the maximum practical conservation obligation be determined for a particular parcel (keeping in mind the fundamental concepts of being simple and flexible)?

19. Since IID is not allowed to store on the River any unused part of its 3.1 MAF, can IID continually maintain a small "overrun" by storing water off stream, without incurring any penalty or obligation?

Response: Anytime IID's diversion exceeds 3.1 MAF minus that year's transfer obligations, a payback obligation will be incurred under the IOP. To the extent that IID's diversion is less than 3.1 MAF minus that year's transfer obligations, IID would, under the terms of the QSA, be allowed to bank or store that "under-use" off stream. IID could then either use the "stored" water to repay a future overrun payback obligation, or to reduce its diversion in a future year in order to avoid incurring a payback obligation.

Here, the question becomes how, where, and at what cost can IID store water off-stream. Potential concepts include funding a conjunctive use groundwater program in CVWD, the Arizona Water Bank, or a groundwater recharge site on the East Mesa. Any of the three would be expensive, and each has its own set of environmental and/or regulatory concerns.

Question for the FBWC: Should the IID invest funds in negotiations with other agencies and technical feasibility studies to pursue potential off-stream storage programs at this time?

20. Will participants and non-participants alike be allowed to obtain extra water from an intra-district water market (and the following three questions related to an intra-district water market)?

Response: As discussed to date, the IID Board would have the authority to implement an intra-district water market if the Board believed such a tool would be necessary to ensure the efficient use of the District's Colorado River entitlement. Basically, that would be to keep any significant portion of our water from flowing through the priority system to junior water right holders (MWD) as unused (and uncompensated) entitlement.

Otherwise, no details of how such a market would function have been addressed.

21. Has any economic or social damage to the community been identified for which part of the transfer revenues would be needed to compensate?

Response: The IID/SDCWA EIR/EIS will disclose the third party and socio-economic impacts of several alternatives. From the aspect of a non-fallowing on-farm water conservation and transfer program, we expect that the community will see positive economic benefits from construction and continuing operations and maintenance activities associated with on-farm conservation projects.

22. Is "levelized payments" to participating landowners during the first ten years something that has already been determined, or is it just an idea for discussion?

Response: At this time, the concept of levelized payments to participants for some period of time (5, 10, 25 years) is open for discussion.

Question to the FBWC: In general, what is your opinion of "levelized" payments as opposed to conservation payments that vary with the price of water?

23. Will landowners be allowed to state which year they want their contract to begin, in addition to stating their maximum conservation per acre?

Response: Please see the previous responses to Questions Number 12 and 13.

24. If a shortage situation triggers a price increase, how is the "extra" money distributed?

Response: The answer to this question has not yet been discussed.

Question for the FBWC: How would the committee suggest that any "extra" funds be distributed?

25. Will a landowner's conservation obligations be kept on record as a specific quantity for each parcel or as a single quantity for his entire holdings?

Response: Under the current farm unit concept, a landowner's conservation obligations would be recorded as specific quantities for each parcel and accumulated into a single quantity for his entire holdings. However, one concept under discussion is that should a landowner for some reason wish to fallow or retire a particular parcel, the landowner could opt out a specific field. However, that field would no longer be eligible for conservation payments and the landowner's farm unit baseline would be reduced accordingly.

Question to the FBWC: I note that many of your questions relate to the farm unit concept. Again keeping in mind the fundamental principals of being simple and flexible, does the FBWC like the farm plan concept? Does the FBWC have suggested improvements to the farm unit concept? Does the FBWC have a suggested alternative to the farm unit concept?

26. Will a landowner be allowed to transfer all of his conservation obligations away from one of his parcels then convert that parcel to non-agricultural uses such as municipal and industrial?

Response: The question of how to address land conversion from agricultural to other uses as the Valley population grows over the life of the QSA and IID/SDCWA

agreement is a critical issue. However, it is an issue that is yet to be discussed in any detail. The general concept under consideration is similar to the response to question 25. A landowner could opt out a specific field. However, that field would no longer be eligible for conservation payments and the landowner's farm unit baseline would be reduced accordingly. The conservation obligation could then be transferred to the next waiting participant (in the ramp-up years) or to a landowner who did not originally participate but wanted to enter the program in later years for instance.

The converted parcel that opted out of the program would still be eligible to receive water for reasonable and beneficial M&I use. To the extent that the new M&I use is less than the old agricultural use (baseline) on that parcel, the difference could either be stored off stream for future use or would flow to the next junior priority holder (MWD under the terms of the QSA). The reduction in use from a simple conversion of land from agricultural use to M&I use cannot be considered conserved and is therefore not transferable for payment, nor can the difference be used to meet any IID IOP repayment obligation.

27. If a participant requests termination of his delivery and the IID system is unable to capture the "returned" water, will it still be considered "used" by the participant?

Response: I would assume that as long as the participant complied with the then current IID Rules and Regulations Governing the Delivery of Water (adequate advance notice) then the loss of "returned" water would not be charged to the participant. However, should such a scenario occur often enough to result in IID diverting more than 3.1 MAF minus that year's transfer obligations, the IID IOP repayment obligation is still ultimately the responsibility of the District's water users. This is the primary reason for making system improvements early in the process: to ensure the capture of water conserved on farm. A concept that was discussed at one time was to only allow on-farm conservation program sign-ups within areas served by lateral interceptors. Thus, the "on-farm program area" would be expanded as additional interceptor systems are completed.

28. What, if anything, happens to the baseline allocation for a parcel which uses no water for an extended period of time?

Response: The baseline is based on the modified historical average of water use from 1987 to 1995. First, I assume that if a participating parcel does not use water for an extended period of time (years), that it would be considered fallow and receive no program payments. However the defined baseline would not change.

If the parcel has a history of water use from 1987-1995, and is not included in a participating farm unit, it has no baseline allocation. I would assume that if at some future time, that parcel was included in a participating farm unit, its baseline would be calculated according to its modified average historical use from 1987-1995.

However, the parcel would have to return to active agricultural production to be in the program (no payment for not farming).

29. What, if anything, happens to the baseline allocation for a parcel which is modified so it is no longer able to be used for agriculture?

Response: Please see the response to Question Number 26.

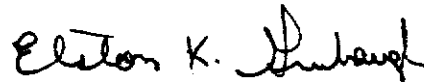
30. Can a participating parcel with 2 AF (net after conservation obligation) available, plant a crop which uses 4 AF in one year, receive its payment for that year, then plant no crop the following year to pay back its overuse, and receive its payment for that year also?

Response: Please see the response to Question Number 18.

Again Larry, I wish to thank you and the Farm Bureau Water Committee for your interest and for the time you give to this process. You pose valid questions and we will use them to further discussions on the on-farm program. I will present your questions to the Board for discussion, however, I do not believe the Board will have the opportunity to consider each one before the next workshop on December 17, 2001. I am responding at this point because you stated that the FBWC needed some clarification in order for the Committee to continue its discussions.

I look forward to seeing the FBWC's suggestions for the On-Farm Program, as well as any additional questions you may have.

Thank you,



ELSTON K. GRUBAUGH
Imperial Irrigation District

EKG:lh

Copy: David Bradshaw
William I. Du Bois

SEQUENCING OF CONSERVATION

REGARDLESS OF:

**OTHER QSA COMPONENTS
SEQUENCE OF CONSERVATION
TIMING OF CONSERVATION**

**FOR ON-FARM CONSERVATION, IID
RECEIVES THE SDCWA PRICE**

SEQUENCING OF CONSERVATION

**FIRST EIGHT YEARS - INSTALL SYSTEM
PROJECTS ALONG SIDE ON-FARM
CONSERVATION**

**■ CAPTURE ON-FARM CONSERVATION
■ PAY OFF SYSTEM IMPROVEMENTS
■ PROVIDE WATER TO CVWD @ O&M
RATE STARTING IN 2007**

SEQUENCING OF CONSERVATION

**FIRST EIGHT YEARS - INSTALL SYSTEM
PROJECTS ALONG SIDE ON-FARM
CONSERVATION**

**2002-2006 - SYSTEM AND ON-FARM WATER
GOES TO SDCWA**

**2007 - SYSTEM WATER BEGINS MOVING TO
CVWD/MWD, REPLACED BY ADDITIONAL
ON-FARM WATER TO SDCWA**

SEQUENCING OF CONSERVATION

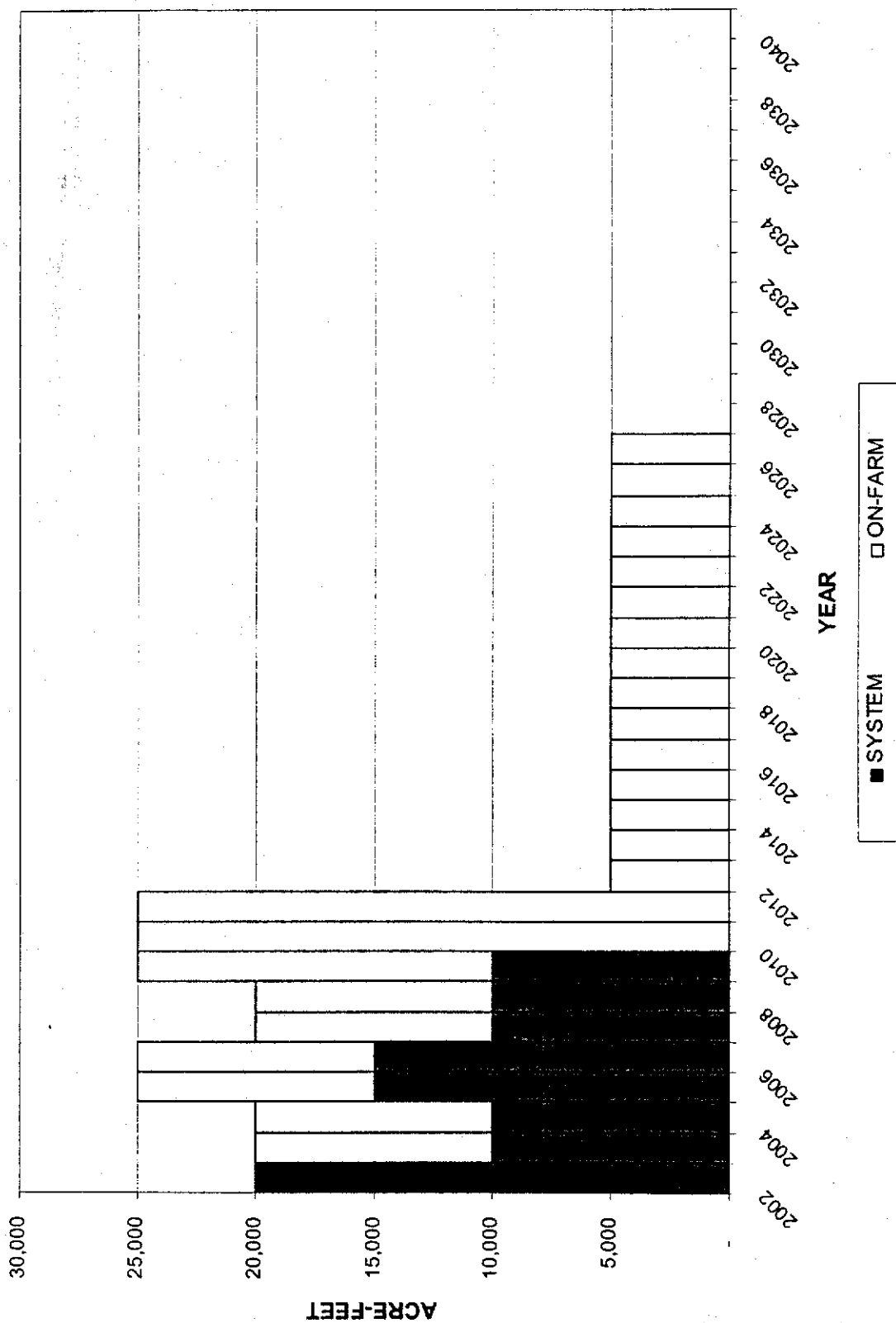
SOURCES OF NEW CONSERVED WATER:

| 2002 | SYSTEM |
|-------------|---------------|
|-------------|---------------|

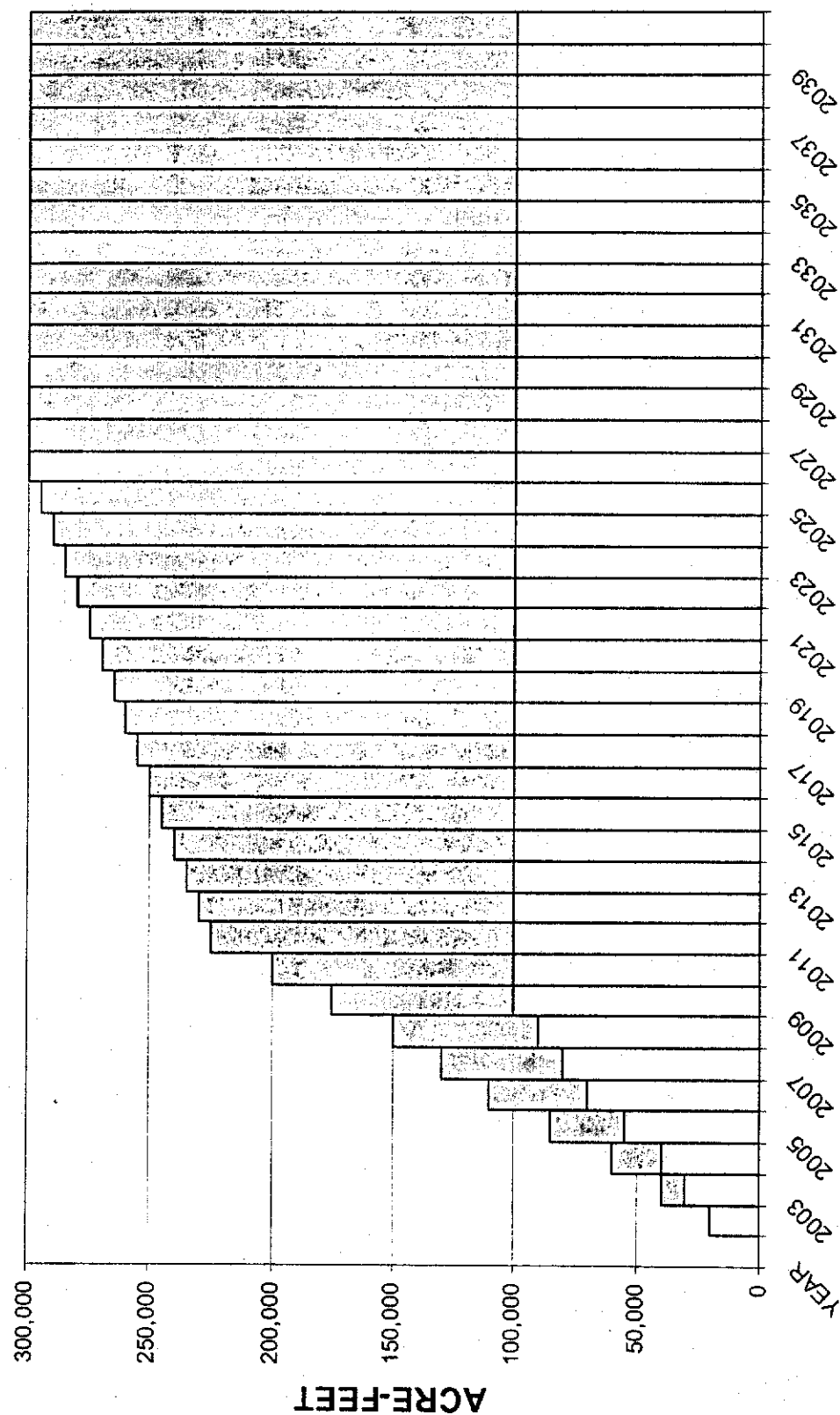
| | |
|--------------------|-----------------------|
| 2003 - 2009 | SYSTEM/ON-FARM |
|--------------------|-----------------------|

| | |
|--------------------|----------------|
| 2010 - 2026 | ON-FARM |
|--------------------|----------------|

CONSERVATION SEQUENCE SOURCES OF NEW CONSERVED WATER



CONSERVATION SEQUENCE



YEAR

□ SYSTEM □ ON-FARM

REVISED IID WATER CONSERVATION AND RAMP-UP SCHEDULE

Per E.B. Spellman Memo dated 20 NOV 2000

Per John Eckhardt's directions, sent via e-mail to Andy Keller, Mike Concannon, and Bob Charlie on 28 NOV 2000 by EKG

| YEAR | SDCWA AT 130 KAF | CVWD/MWD (KAF) | TOTAL KAF with QSA (SDCWA at 130 KAF) | SDCWA AT 200 KAF | TOTAL KAF with QSA (SDCWA at 200 KAF) |
|------|------------------|----------------|---|---------------------|---|
| 2002 | 20.0 | | 20.0 | 20.0 | 20.0 |
| 2003 | 40.0 | | 40.0 | 40.0 | 40.0 |
| 2004 | 60.0 | | 60.0 | 60.0 | 60.0 |
| 2005 | 82.5 | 2.5 | 85.0 | 82.5 | 85.0 |
| 2006 | 105.0 | 5.0 | 110.0 | 105.0 | 110.0 |
| 2007 | 122.5 | 7.5 | 130.0 | 122.5 | 130.0 |
| 2008 | 130.0 | 10.0 | 140.0 | 140.0 | 150.0 |
| 2009 | 130.0 | 15.0 | 145.0 | 160.0 | 175.0 |
| 2010 | 130.0 | 20.0 | 150.0 | 180.0 | 200.0 |
| 2011 | 130.0 | 25.0 | 155.0 | 200.0 | 225.0 |
| 2012 | 130.0 | 30.0 | 160.0 | 200.0 | 230.0 |
| 2013 | 130.0 | 35.0 | 165.0 | 200.0 | 235.0 |
| 2014 | 130.0 | 40.0 | 170.0 | 200.0 | 240.0 |
| 2015 | 130.0 | 45.0 | 175.0 | 200.0 | 245.0 |
| 2016 | 130.0 | 50.0 | 180.0 | 200.0 | 250.0 |
| 2017 | 130.0 | 55.0 | 185.0 | 200.0 | 255.0 |
| 2018 | 130.0 | 60.0 | 190.0 | 200.0 | 260.0 |
| 2019 | 130.0 | 65.0 | 195.0 | 200.0 | 265.0 |
| 2020 | 130.0 | 70.0 | 200.0 | 200.0 | 270.0 |
| 2021 | 130.0 | 75.0 | 205.0 | 200.0 | 275.0 |
| 2022 | 130.0 | 80.0 | 210.0 | 200.0 | 280.0 |
| 2023 | 130.0 | 85.0 | 215.0 | 200.0 | 285.0 |
| 2024 | 130.0 | 90.0 | 220.0 | 200.0 | 290.0 |
| 2025 | 130.0 | 95.0 | 225.0 | 200.0 | 295.0 |
| 2026 | 130.0 | 100.0 | 230.0 | 200.0 | 300.0 |

FINANCIAL PROJECTIONS

| Year | Real Price ('01\$) | | |
|------|--------------------|---------|----------|
| | SDCWA | CVWD I | CVWD II |
| 2002 | \$243.07 | | |
| 2003 | \$254.68 | | |
| 2004 | \$266.68 | | |
| 2005 | \$279.10 | | \$134.61 |
| 2006 | \$291.93 | | \$134.61 |
| 2007 | \$305.19 | \$53.84 | \$134.61 |
| 2008 | \$318.89 | \$53.84 | |
| 2009 | \$333.05 | \$53.84 | |
| 2010 | \$347.68 | \$53.84 | |
| 2011 | \$362.79 | \$53.84 | |
| 2012 | \$380.11 | \$53.84 | |
| 2013 | \$386.87 | \$53.84 | |
| 2014 | \$393.64 | \$53.84 | |
| 2015 | \$400.40 | \$53.84 | |
| 2016 | \$407.16 | \$53.84 | |
| 2017 | \$412.81 | \$53.84 | |
| 2018 | \$418.46 | \$53.84 | |
| 2019 | \$418.60 | \$53.84 | |
| 2020 | \$418.73 | \$53.84 | |
| 2021 | \$419.39 | \$53.84 | |
| 2022 | \$429.33 | \$53.84 | |
| 2023 | \$429.95 | \$53.84 | |
| 2024 | \$430.57 | \$53.84 | |
| 2025 | \$431.18 | \$53.84 | |
| 2026 | \$431.78 | \$53.84 | |
| 2027 | \$432.38 | \$53.84 | \$134.61 |
| 2028 | \$432.97 | \$53.84 | \$134.61 |
| 2029 | \$433.55 | \$53.84 | \$134.61 |
| 2030 | \$434.13 | \$53.84 | \$134.61 |
| 2031 | \$434.70 | \$53.84 | \$134.61 |
| 2032 | \$431.06 | \$53.84 | \$134.61 |
| 2033 | \$431.72 | \$53.84 | \$134.61 |
| 2034 | \$432.38 | \$53.84 | \$134.61 |
| 2035 | \$433.02 | \$53.84 | \$134.61 |
| 2036 | \$433.66 | \$53.84 | \$134.61 |
| 2037 | \$434.29 | \$53.84 | \$134.61 |
| 2038 | \$434.92 | \$53.84 | \$134.61 |
| 2039 | \$435.53 | \$53.84 | \$134.61 |
| 2040 | \$436.14 | \$53.84 | \$134.61 |
| 2041 | \$436.74 | \$53.84 | \$134.61 |
| 2042 | \$437.33 | \$53.84 | \$134.61 |
| 2043 | \$437.91 | \$53.84 | \$134.61 |
| 2044 | \$438.49 | \$53.84 | \$134.61 |
| 2045 | \$439.06 | \$53.84 | \$134.61 |
| 2046 | \$439.63 | \$53.84 | \$134.61 |

Prices shown are in 2001 dollars.

CVWD 1 refers to the first 50,000 acre-feet of CVWD/MWD water.

CVWD 2 refers to the second 50,000 acre-feet of CVWD water.

Under the proposed terms of the QSA, MWD may take and pay for any water declined by CVWD. However, MWD pays the CVWD 2 rate regardless of the year.

The early (2005-07) CVWD/MWD water is priced at the CVWD 2 rate.